

SAFETY DATA SHEET		
RHODIASOLV IRIS		
Revision: 1.01 US (EN)	Issuing date: 09/17/2014	

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : RHODIASOLV IRIS

1.2 Relevant identified uses of the substance or mixture and uses advised against

Uses of the Substance / Mixture : Specific use(s): Solvent, Cleaning agent

Specific use(s): Use of this product is limited by TSCA regulations, see Section 15.

1.3 Details of the supplier of the safety data sheet

Company : Solvay USA Inc.,
NOVECARE
8 Cedar Brook Drive
Cranbury, NJ, 08512-7500, US
Telephone number: 800-973-7873

1.4 Emergency telephone

FOR EMERGENCIES INVOLVING A SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT CONTACT: CHEMTREC 800-424-9300 within the United States and Canada, or 703-527-3887 for international collect calls.

SECTION 2: Hazards identification

Although OSHA has not adopted the environmental portion of the GHS regulations, this document may include information on environmental effects.

2.1 Classification of the substance or mixture

HCS 2012 (29 CFR 1910.1200)

Not a hazardous product according to Globally Harmonized System (GHS)

2.2 Label elements

HCS 2012 (29 CFR 1910.1200)

Not a hazardous product according to Globally Harmonized System (GHS)

2.3 Other hazards which do not result in classification

H402: Harmful to aquatic life.

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SECTION 3: Composition/information on ingredients

3.1 Substance

Chemical nature : Dimethyl 2-methylpentanedioate

Hazardous Ingredients and Impurities

Chemical Name	Identification number CAS-No.	Concentration [%]
Dimethyl Adipate	627-93-0	1 - 5
Phenol, methyl-	1319-77-3	0.1 - 0.3

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

Non Hazardous Ingredients and Impurities

Chemical Name	Identification number CAS-No.	Concentration [%]
Dimethyl-2-Methyl Glutarate	14035-94-0	> 85

3.2 Mixture

Not applicable, this product is a substance.

SECTION 4: First aid measures

4.1 Description of first-aid measures

- General advice : Show this material safety data sheet to the doctor in attendance.
First responder needs to protect himself.
Place affected apparel in a sealed bag for subsequent decontamination.
- If inhaled : If inhaled, remove to fresh air.
Consult a physician if necessary.
- Skin contact : Take off contaminated clothing and shoes immediately.
Wash off with plenty of water.

Consult a physician if necessary.
- Eye contact : Rinse with running water while keeping the eyes wide open (at least 15 minutes).

If eye irritation persists, consult a physician.
- Ingestion : Do NOT induce vomiting.
Rinse mouth with water.

Consult a physician if necessary.

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4.2 Most important symptoms and effects, both acute and delayed

no data available

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Treat symptomatically.
There is no specific antidote available.

SECTION 5: Firefighting measures

Flash point : 208 °F (98 °C)
closed cup

Flammability class: Will burn

Autoignition temperature : 806 °F (430 °C)

Flammability / Explosive limit : no data available

5.1 Extinguishing media

Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Multipurpose powders

Unsuitable extinguishing media : High volume water jet
(frothing possible)

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting : On heating there is a risk of a buildup of pressure in hermetically sealed containers or tanks.
Under fire conditions:
Will burn
On combustion or on thermal decomposition (pyrolysis), releases:
Carbon oxides

5.3 Advice for firefighters

Special protective equipment for fire-fighters : Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

Specific fire fighting methods : Cool containers/tanks with water spray.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions, protective equipment and emergency procedures :

- Avoid contact with the skin and the eyes.
- Do not breathe vapor.
- Do not allow uncontrolled discharge of product into the environment.
- Personal protective equipment
- Wear suitable protective equipment.
- Wear suitable gloves.
- Safety glasses
- Stop the leak. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2 Environmental precautions

Environmental precautions :

- Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.
- Do not flush into surface water or sanitary sewer system.
- Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies

6.3 Methods and materials for containment and cleaning up

Methods for containment :

- Keep in properly labeled containers.
- Keep in suitable, closed containers for disposal.

Recovery :

- Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
- Sweep up or vacuum up spillage and collect in suitable container for disposal.
- Never return spills in original containers for re-use.

Decontamination / cleaning :

- Wash with plenty of water and detergent.
- Wash nonrecoverable remainder with large amounts of water.
- Recover the cleaning water for subsequent disposal.
- Decontaminate tools, equipment and personal protective equipment in a segregated area.

Disposal :

- Dispose of in accordance with local regulations.

Additional advice :

- Material can create slippery conditions.

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6.4 Reference to other sections

Reference to other sections : 7. HANDLING AND STORAGE
8. EXPOSURE CONTROLS/PERSONAL PROTECTION
13. DISPOSAL CONSIDERATIONS

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures : Use only in area provided with appropriate exhaust ventilation.

Advice on safe handling and usage : Handle in accordance with good industrial hygiene and safety practice.

Avoid splashes.
Avoid inhalation, ingestion and contact with skin and eyes.

Hygiene measures : Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:

- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes or contact with material.

Use clean, well maintained personal protection equipment.

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures for storage : Take all necessary measures to avoid accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems.

Storage conditions

Recommended : Keep container tightly closed in a dry and well-ventilated place.

To be avoided : Keep away from incompatible materials to be indicated by the manufacturer
Keep away from open flames, hot surfaces and sources of ignition.
Keep away from direct sunlight.

Incompatible products : Strong acids
Strong bases
Strong oxidizing agents
Strong reducing agents.

Storage stability

Storage temperature : no data available

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7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

Introductory Remarks:

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.

Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

8.1 Control parameters

Contains no substances with occupational exposure limit values.

NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations)

Ingredients	CAS-No.	Concentration
Phenol, methyl-	1319-77-3	250 ppm

8.2 Exposure controls

Control measures

Engineering measures

: Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures :

Effective exhaust ventilation system

Personal protective equipment

Respiratory protection

: When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

No personal respiratory protective equipment normally required.

Hand protection

: Where there is a risk of contact with hands, use appropriate gloves
Gloves must be inspected prior to use.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Eye protection

: Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices. Appropriate ANSI Z87 approved equipment should be selected for the particular use intended for this material.

Eye contact should be prevented through the use of:

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Safety glasses with side-shields

Skin and body protection

: Protective suit

impervious clothing
Footwear protecting against chemicals

Hygiene measures

: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this materials:

- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes or contact with material.

Use clean, well maintained personal protection equipment.

Protective measures

: Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use. Ensure that eyewash stations and safety showers are close to the workstation location. Emergency equipment immediately accessible, with instructions for use. The protective equipment must be selected in accordance with current local standards and in cooperation with the supplier of the protective equipment.

SECTION 9: Physical and chemical properties

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product information phone number in Section 1 for its exact specifications.

9.1 Information on basic physical and chemical properties

Appearance	:	Physical state: liquid Color: colorless
Odor	:	characteristic
Odor Threshold	:	no data available
pH	:	5.0
Freezing point	:	< -103 °F (< -75 °C)
Boiling point/boiling range	:	420.1 °F (215.6 °C)
Flash point	:	208 °F (98 °C) closed cup
		Flammability class: Will burn

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Evaporation rate (Butylacetate = 1)	:	no data available
Flammability (solid, gas)	:	no data available
Flammability (liquids)	:	no data available
Flammability / Explosive limit	:	no data available
Autoignition temperature	:	806 °F (430 °C)
Vapor pressure	:	0.05 mmHg (0.063 hPa) (68 °F (20 °C))
Vapor density	:	no data available
Density	:	Relative density : 1.0553 (68 °F (20 °C))
Solubility	:	<u>Water solubility :</u> 25 g/l (68 °F (20 °C)) <u>Solubility in other solvents:</u> organic polar solvents : soluble Aromatic hydrocarbons : completely miscible
Partition coefficient: n-octanol/water	:	log Pow: 0.89 (77 °F (25 °C))
Thermal decomposition	:	no data available
Viscosity	:	no data available
Explosive properties	:	negative Mechanical sensitivity (shock) negative Thermal sensitivity
Oxidizing properties	:	Not considered as oxidizing., Structure-activity relationship (SAR)
<u>9.2 Other information</u>		
Surface tension	:	64 mN/m (69.3 °F (20.7 °C))

SECTION 10: Stability and reactivity

10.1 Reactivity

Reactivity	:	Stable at normal ambient temperature and pressure.
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10.2 Chemical stability

Chemical stability : Stable under normal conditions.

Stable under recommended storage conditions.
See chapter
7. HANDLING AND STORAGE

10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

Polymerization : Hazardous polymerization does not occur.

10.4 Conditions to avoid

Conditions to avoid : Keep away from flames and sparks.
Keep away from heat and sources of ignition.

10.5 Incompatible materials

Materials to avoid : Strong acids
Strong bases
Strong oxidizing agents
Strong reducing agents

10.6 Hazardous decomposition products

Decomposition products : On combustion or on thermal decomposition (pyrolysis), releases:
(Carbon oxides (CO + CO₂)).

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity : LD50 : > 2,000 mg/kg - Rat
No mortality observed at this dose.
Not classified as harmful if swallowed
Unpublished internal reports

Acute inhalation toxicity : LC50 - 4 h : > 5.6 mg/l - Rat
No mortality observed at this dose.
Not classified as harmful by inhalation
Unpublished internal reports

Acute dermal toxicity : LD50 : > 2,000 mg/kg - Rat
No mortality observed at this dose.
Not classified as harmful by contact with skin
Unpublished internal reports

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Acute toxicity (other routes of administration) : no data available

Skin corrosion/irritation

Skin irritation : Rabbit
No skin irritation
Unpublished internal reports

Serious eye damage/eye irritation

Eye irritation : Rabbit
No eye irritation
Unpublished internal reports

Respiratory or skin sensitization

Sensitization : Local lymph node assay - Mouse
not sensitizing
Unpublished internal reports

Mutagenicity

Genotoxicity in vitro : Ames test
with and without metabolic activation
negative
Unpublished internal reports

Mutagenicity (in vitro mammalian cytogenetic test)
Strain: Human lymphocytes
with and without metabolic activation
negative
Unpublished internal reports

Genotoxicity in vivo : In vivo micronucleus test - Mouse
Intraperitoneal route
ambiguous
Unpublished internal reports

In vivo micronucleus test - Mouse
Intraperitoneal route
negative
Unpublished internal reports

Carcinogenicity

Carcinogenicity : no data available

This product does not contain any ingredient designated as probable or suspected human carcinogens by:

NTP
IARC
OSHA
ACGIH

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Toxicity for reproduction and development

Toxicity to reproduction / fertility	: Rat Oral exposure Method: OECD Test Guideline 422 no impairment of fertility has been observed Unpublished internal reports
Developmental Toxicity/Teratogenicity	: Rat Oral exposure NOAEL teratogenicity: 1,000 mg/kg Rat Oral exposure NOEL maternal: 300 mg/kg Method: OECD Test Guideline 414 no embryotoxic or teratogenic effects have been observed Unpublished internal reports Rabbit Oral exposure NOAEL teratogenicity: 300 mg/kg Rabbit Oral exposure NOEL maternal: 100 mg/kg Method: OECD Test Guideline 414 no embryotoxic or teratogenic effects have been observed Unpublished internal reports

STOT

STOT-single exposure	: Toxicology Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT-repeated exposure	: Toxicology Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure. Oral exposure 28 - 45 Days - Rat NOAEL: 300 mg/kg Method: OECD Test Guideline 422 No systemic toxicity observed. Unpublished internal reports If inhaled 90 Days - Rat Vapor Aerosol at high levels Possible effects on the olfactory epithelium No systemic toxicity observed. Unpublished internal reports

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Experience with human exposure

Experience with human exposure : Ingestion : Symptoms: Vomiting

Aspiration toxicity

Aspiration toxicity : no data available

SECTION 12: Ecological information

12.1 Toxicity

Aquatic Compartment

Acute toxicity to fish : LC50 - 96 h : 56 mg/l - Oncorhynchus mykiss (rainbow trout)
Unpublished internal reports

Acute toxicity to daphnia and other aquatic invertebrates. : EC50 - 48 h : > 100 mg/l - Daphnia magna (Water flea)
Unpublished internal reports

Toxicity to aquatic plants : EC50 - 72 h : > 60 mg/l - Pseudokirchneriella subcapitata
Unpublished internal reports

Ecotoxicity assessment

Acute aquatic toxicity : Harmful to aquatic organisms.

12.2 Persistence and degradability

Biodegradability

Biodegradability : Readily biodegradable.

Ultimate aerobic biodegradability
Method: OECD Test Guideline 301
74 % - 28 Days
Unpublished internal reports

Degradability assessment

Degradability assessment
Dimethyl Adipate : The product is considered to be rapidly degradable in the environment

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water : Not potentially bioaccumulable
Unpublished internal reports

12.4 Mobility in soil

Adsorption potential (Koc) : Log Koc: < 1.25
Highly mobile in soils
Unpublished internal reports

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Known distribution to environmental compartments : Ultimate destination of the product: Water

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment

Dimethyl Adipate

: This substance is not considered to be persistent, bioaccumulating, and toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

Environment assessment

: Harmful to aquatic life.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product Disposal

Prohibition

: Should not be released into the environment.
Do not let product enter drains.

Advice on Disposal

: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

Waste Code

: EPA:
Hazardous Waste – NO

Advice on cleaning and disposal of packaging

Advice

: Empty the packaging completely prior to disposal.
Completely empty the packaging prior to decontamination.
Carefully drain and then steam clean.
Offer rinsed packaging material to local recycling facilities.

Other data

: Dispose of in accordance with local regulations.

SECTION 14: Transport information

DOT

not regulated

TDG

not regulated

IMDG

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not regulated

IATA

not regulated

Note: The above regulatory prescriptions are those valid on the date of publication of this sheet. Given the possible evolution of transportation regulations for hazardous materials, it would be advisable to check their validity with your sales office.

SECTION 15: Regulatory information

15.1 Notification status

United States TSCA Inventory	: y (positive listing) On TSCA Inventory
Canadian Domestic Substances List (DSL)	: y (positive listing) All components of this product are on the Canadian DSL.
Australia Inventory of Chemical Substances (AICS)	: y (positive listing) On the inventory, or in compliance with the inventory
Japan. CSCL - Inventory of Existing and New Chemical Substances	: y (positive listing) On the inventory, or in compliance with the inventory
Korea. Korean Existing Chemicals Inventory (KECI)	: y (positive listing) On the inventory, or in compliance with the inventory
China. Inventory of Existing Chemical Substances in China (IECSC)	: y (positive listing) On the inventory, or in compliance with the inventory

15.2 Federal Regulations

Inventory issues

: This product is subject to limitations and/or restrictions on its use because of a Consent Order under TSCA

Use of this product in Canada is subject to Significant New Activity Notice (SNAc) No. 15419, which defines a significant new activity as the use in consumer products that results or may result in direct or potential exposure of consumers to the substance.

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SARA 311/312 Hazards

Fire Hazard	no
Reactivity Hazard	no
Sudden Release of Pressure Hazard	no
Acute Health Hazard	no
Chronic Health Hazard	no

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No.	Reportable quantity
Phenol, methyl-	1319-77-3	100 lb
Methanol	67-56-1	5000 lb

SARA 304 Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Reportable Quantity

This material does not contain any components with a SARA 302 RQ.

15.3 State Regulations

California Prop 65 : WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.
Methanol

SECTION 16: Other information

NFPA-Classification

Health : 1 slight
Flammability : 1 slight
Instability or Reactivity : 0 minimal

HMIS-Classification

Health : 1 slight
Flammability : 1 slight
Reactivity : 0 minimal

Further information

Date Prepared : 09/17/2014
Further information : Product classified under the US GHS format.

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Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	:	American Conference of Governmental Industrial Hygienists
OSHA	:	Occupational Safety and Health Administration
WHMIS	:	Workplace Hazardous Materials Information System
NTP	:	National Toxicology Program
IARC	:	International Agency for Research on Cancer
SAEL	:	Solvay Acceptable Exposure Limit
NIOSH	:	National Institute for Occupational Safety and Health
NFPA	:	National Fire Protection Association
HMIS	:	Hazardous Materials Identification System (Paint & Coating)

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. Such information is only given as a guidance to help the user handle, use, process, store, transport, dispose, and release the product in satisfactory safety conditions and is not to be considered as a warranty or quality specification. It should be used in conjunction with technical sheets but do not replace them. Thus, the information only relates to the designated specific product and may not be applicable if such product is used in combination with other materials or in another manufacturing process, unless otherwise specifically indicated. It does not release the user from ensuring he is in conformity with all regulations linked to its activity.